

(12) United States Patent Haishi et al.

(54) METHOD FOR PRODUCTION OF

TRANSPARENT CONDUCTIVE FILM (71) Applicant: NITTO DENKO CORPORATION,

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This patent is subject to a terminal dis-

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ABSTRACT

A method for producing a transparent conductive film includes heat-treating a transparent conductive film comprising a transparent film substrate and a transparent conductive laminate including a first transparent conductive layer and a second transparent conductive layer, so that the first and the second transparent conductive layers in the transparent conductive film are crystallized, wherein the first transparent conductive layer is a first amorphous layer comprising indium oxide or an indium-based complex oxide having a tetravalent metal element oxide, the second transparent conductive layer is a second amorphous layer comprising an indium-based complex oxide having a tetravalent metal element oxide, wherein each of the first and the second contents of the tetravalent metal element oxide content is expressed by the formula: {the amount of the tetravalent (Continued)

